

REMARKS

A. Regarding the Amendments

By the present communication, claims 1-20 have been cancelled and claims 30-50 have been added. The claims are supported by the specification and the original claims and add no new matter. For example, support for the phrase "wherein when the liquid medium contains more than one particle, the particles are identical or vary in size, shape, and density" as recited in new claim 30, is found in the specification at page 27, line 16, to page 28, line 20. Support for the requirement that the particles "occupy a volume equal to from about 5% to 80% of the liquid medium volume" as recited in new claims 31 and 34, is found in the specification at page 26, lines 1-3. Support for the requirement that the spherical bead has a diameter of about 3 to 10 mm as recited in claim 33, is found throughout the specification (see, e.g., page 28, lines 2-6; page 33, lines 32-35). Support for the requirement that the oscillation time period is "about 20-45 seconds" as recited in new claims 35 and 37, is found throughout the specification (see, e.g., page 18, lines 18-21. Support for the phrase "clearance between the spherical particle and the inner container wall of from about 0.025 to 3.0 mm" as recited in new claims 33, 39, and 43, is found in the specification at page 22, lines 31-33. Upon entry of this amendment, claims 30-49 are under examination.

B. Rejections Under 35 U.S.C. § 103(a)

The rejection of claims 1-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Melendez, et. al. (U.S. 5,464,773), is rendered moot by the cancellation of these claims herein.

The rejection of claims 1-20 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Zlobinsky, et. al. (U.S. Patent No. 5,567,050), the 1995-96 Cole-Palmer Catalogue (pages 539 and 548), and the Fisher Catalogue ("Cell Homogenizer MSK", page 609), in view of

Moore, et. al. (U.S. Patent 4, 295, 613) and Murphy, et. al. (EPO 0 288 618), is rendered moot by the cancellation of these claims herein.

In addition, it is respectfully submitted that the rejections do not apply to new claims 30-50. None of the cited references disclose or suggest methods for isolating high molecular weight nucleic acid (i.e., greater than 10 kilobases). To the contrary, the devices used in the cited references (bead mills, pressure cells, glass dounce, 18 gauge needles) exert uncontrollable sheer forces that reduce the high molecular weight nucleic acid to small fragments. Moreover, it is respectfully submitted that none of the cited references disclose or suggest a method of isolating high molecular weight nucleic acid from a biological material, wherein the method includes employing a liquid medium containing one or more particles and detergent in an amount of from 0.1% to 10% weight per weight (w/w), wherein when the liquid medium contains more than one particle, the particles are identical or vary in size, shape, and density.

C. Rejection Under Obviousness-type Double Patenting

The rejection of claims 1-20 under the judicially created doctrine of obviousness-type double patenting as being unpatenable over claims 1-37 of U.S. Patent No. 6,235,501, is rendered moot by the cancellation of these claims herein.

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Page 8

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CONCLUSION

In view of the above amendments and remarks, reconsideration and favorable action on all claims are respectfully requested. In the event any matters remain to be resolved, the Examiner is requested to contact the undersigned at the telephone number given below so that a prompt disposition of this application can be achieved.

Respectfully submitted,

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